

KBPC15S SERIES ζ¹ RoHS

15A SINGLE-PHASE BRIDGE RECTIFIER

Features

- **Diffused Junction**
- Low Forward Voltage Drop
- High Current Capability
- **High Reliability**
- High Surge Current Capability
- **Designed for Saving Mounting Space**
- Recognized File # E157705

Mechanical Data

- Case: KBPC-S, Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 23 cm-kg (20 in-lbs) Max.
- Weight: 21 grams (approx.)
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4

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METAL HEATSINK

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KBPC-S					
Dim	Min	Max			
Α	28.40	28.70			
В	10.97	11.23			
С	—	21.00			
D	—	25.00			
Е	5.10	-			
G	1.20 Ø Typical				
Н	3.05	3.60			
J	5.08 Ø Nominal				
All Dimensions in mm					



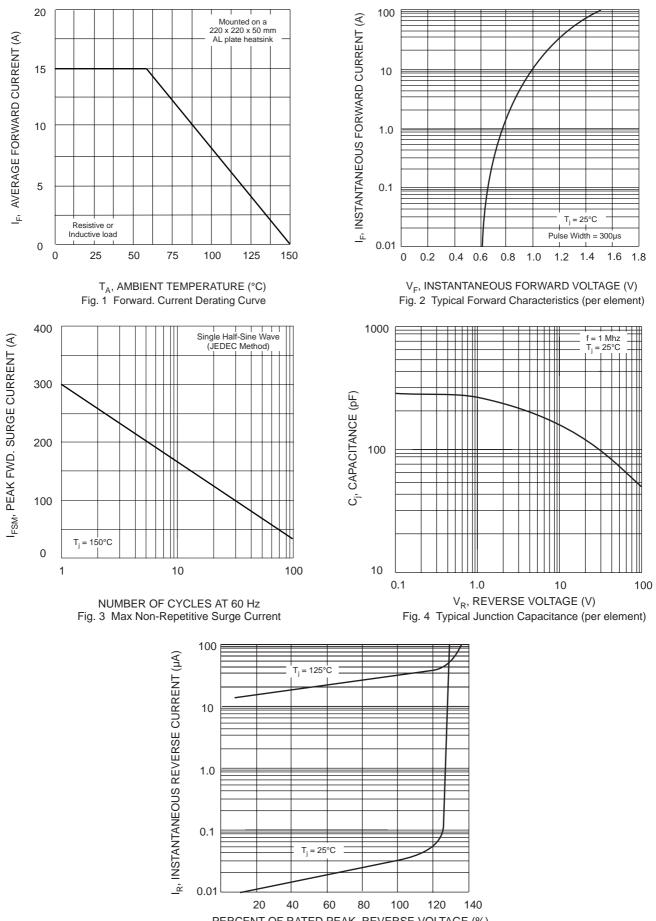
В

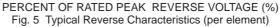
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symphol	KBPC15								Unit		
Characteristic	Symbol	00S	01S	02S	04S	06S	08S	10S	12S	14S	16S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current $@T_A = 60^{\circ}C$ Io 15					А							
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300					A					
Forward Voltage per leg $@I_F = 7.5A$	Vfm	1.1				V						
Peak Reverse Current $@T_c = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_c = 125^{\circ}C$	Irm	10 500					μA					
I ² t Rating for Fusing (t < 8.3ms)	l ² t	373			A ² s							
Typical Junction Capacitance (Note 1)	Cj	200			pF							
Typical Thermal Resistance per leg (Note 2)	Note 2) R θ JC 2.6			°C/W								
RMS Isolation Voltage from Case to Leads VIso		2500				V						
Operating and Storage Temperature Range	Tj, Tstg	G -65 to +150			°C							

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance junction to case, mounted on heatsink.





MARKING INFORMATION



 WTE
 = Manufacturer's Logo

 KBPC15xxS
 = Device Number

 xx
 = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16

 Polarity
 = As Marked on Body

PACKAGING INFORMATION

BULK

Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	(KG)
195 x 195 x 40	80	405 x 205 x 240	800	17.0

Note: 1. Paper box, white or brown color.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1500S	SIL Bridge	80 Units/Box
KBPC1501S	SIL Bridge	80 Units/Box
KBPC1502S	SIL Bridge	80 Units/Box
KBPC1504S	SIL Bridge	80 Units/Box
KBPC1506S	SIL Bridge	80 Units/Box
KBPC1508S	SIL Bridge	80 Units/Box
KBPC1510S	SIL Bridge	80 Units/Box
KBPC1512S	SIL Bridge	80 Units/Box
KBPC1514S	SIL Bridge	80 Units/Box
KBPC1516S	SIL Bridge	80 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

2. To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBPC1500S-LF.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd. No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan Phone: 886-7-822-5408 or 886-7-822-5410 Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com

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